

PARALLEL ANALYSIS OF INCOMING DATA TRANSMISSIONS

CROSS-REFERENCE TO RELATED APPLICATION(S)

[0001] This application claims the benefit of U.S. Provisional Application No. 60/287,069 entitled "METHOD FOR IMPLEMENTING A CLUSTER NETWORK FOR HIGH PERFORMANCE AND HIGH AVAILABILITY USING A FIBRE CHANNEL SWITCH FABRIC," filed April 27, 2001; U.S. Provisional Application No. 60/287,120 entitled "MULTI-PROTOCOL NETWORK FOR ENTERPRISE DATA CENTERS," filed April 27, 2001; U.S. Provisional Application No. 60/286,918 entitled "UNIFIED ENTERPRISE NETWORK SWITCH (UNEX) PRODUCT SPECIFICATION," filed April 27, 2001; U.S. Provisional Application No. 60/286,922 entitled "QUALITY OF SERVICE EXAMPLE," filed April 27, 2001; U.S. Provisional Application No. 60/287,081 entitled "COMMUNICATIONS MODEL," filed April 27, 2001; U.S. Provisional Application No. 60/287,075 entitled "UNIFORM ENTERPRISE NETWORK SYSTEM," filed April 27, 2001; U.S. Provisional Application No. 60/314,088 entitled "INTERCONNECT FABRIC MODULE," filed August 21, 2001; U.S. Provisional Application No. 60/314,287 entitled "INTEGRATED ANALYSIS OF INCOMING DATA TRANSMISSIONS," filed August 22, 2001; U.S. Provisional Application No. 60/314,158 entitled "USING VIRTUAL IDENTIFIERS TO ROUTE TRANSMITTED DATA THROUGH A NETWORK," filed August 21, 2001, and is related to U.S. Patent Application No. 10/062,199 entitled "METHOD AND SYSTEM FOR VIRTUAL ADDRESSING IN A COMMUNICATIONS NETWORK," (Attorney Docket No. 030048019US1); U.S. Patent Application No. 10/066,104 entitled "METHOD AND SYSTEM FOR LABEL TABLE CACHING IN A ROUTING DEVICE," (Attorney Docket No. 030048024US); U.S. Patent Application No. 10/039,505 entitled "METHOD AND SYSTEM FOR MULTIFRAME BUFFERING IN A ROUTING DEVICE," (Attorney Docket No. 030048025US); U.S. Patent Application No.

10/046,333 entitled "METHOD AND SYSTEM FOR DOMAIN ADDRESSING IN A COMMUNICATIONS NETWORK," (Attorney Docket No. 030048026US); U.S. Patent Application No. 10/039,404 entitled "METHOD AND SYSTEM FOR INTERSWITCH LOAD BALANCING IN A COMMUNICATIONS NETWORK," (Attorney Docket No. 030048027US); U.S. Patent Application No. 10/046,572 entitled "METHOD AND SYSTEM FOR INTERSWITCH DEADLOCK AVOIDANCE IN A COMMUNICATIONS NETWORK," (Attorney Docket No. 030048028US); U.S. Patent Application No. 10/039,877 entitled "METHOD AND SYSTEM FOR CONNECTION PREEMPTION IN A COMMUNICATIONS NETWORK," (Attorney Docket No. 030048029US); U.S. Patent Application No. 10/061,564 entitled "METHOD AND SYSTEM FOR MULTICASTING IN A ROUTING DEVICE," (Attorney Docket No. 030048030US); U.S. Patent Application No. 10/046,640 entitled "METHOD AND SYSTEM FOR NETWORK CONFIGURATION DISCOVERY IN A NETWORK MANAGER," (Attorney Docket No. 030048032US); U.S. Patent Application No. 10/046,334 entitled "METHOD AND SYSTEM FOR PATH BUILDING IN A COMMUNICATIONS NETWORK," (Attorney Docket No. 030048033US); U.S. Patent Application No. 10/039,703 entitled "METHOD AND SYSTEM FOR RESERVED ADDRESSING IN A COMMUNICATIONS NETWORK," (Attorney Docket No. 030048035US); U.S. Patent Application No. 10/039,814 entitled "METHOD AND SYSTEM FOR RECONFIGURING A PATH IN A COMMUNICATIONS NETWORK," (Attorney Docket No. 030048036US1); U.S. Patent Application No. 10/066,217 entitled "METHOD AND SYSTEM FOR ADMINISTRATIVE PORTS IN A ROUTING DEVICE," (Attorney Docket No. 030048037US); U.S. Patent Application No. 10/039,784 entitled "PARALLEL ANALYSIS OF INCOMING DATA TRANSMISSIONS," (Attorney Docket No. 030048038US); U.S. Patent Application No. 10/066,159 entitled "INTEGRATED ANALYSIS OF INCOMING DATA TRANSMISSIONS," (Attorney Docket No. 030048039US); U.S. Patent Application No. 10/062,245 entitled "USING VIRTUAL IDENTIFIERS TO ROUTE TRANSMITTED DATA THROUGH A

NETWORK," (Attorney Docket No. 030048040US); U.S. Patent Application No. 10/044,182 entitled "USING VIRTUAL IDENTIFIERS TO PROCESS RECEIVED DATA ROUTED THROUGH A NETWORK," (Attorney Docket No. 030048041US); U.S. Patent Application No. 10/044,164 entitled "METHOD AND SYSTEM FOR PERFORMING SECURITY VIA VIRTUAL ADDRESSING IN A COMMUNICATIONS NETWORK," (Attorney Docket No. 030048042US); and U.S. Patent Application No. 10/068,329 entitled "METHOD AND SYSTEM FOR PERFORMING SECURITY VIA DE-REGISTRATION IN A COMMUNICATIONS NETWORK" (Attorney Docket No. 030048043US), which are all hereby incorporated by reference in their entirety.

TECHNICAL FIELD

[0002] The following disclosure relates generally to computer networks, and more particularly to performing multiple analysis techniques in parallel when processing data transmitted through a network.

BACKGROUND

[0003] The Internet has emerged as a critical commerce and communications platform for businesses and consumers worldwide. The dramatic growth in the number of Internet users, coupled with the increased availability of powerful new tools and equipment that enable the development, processing, and distribution of data across the Internet, have led to a proliferation of Internet-based applications. These applications include e-commerce, e-mail, electronic file transfers, and online interactive applications. As the number of users of and uses for the Internet increases, so does the complexity and volume of Internet traffic. Because of this traffic and its business potential, a growing number of companies are building businesses around the Internet and developing mission-critical business applications to be provided by the Internet.

[0004] Existing enterprise data networks ("EDNs") that support e-commerce applications are straining under the demand to provide added performance and